

What is claimed is:

[Claim 1] 1. A method for detecting an advertising section within a video signal comprising:

- (a) storing at least one reference frame;
- (b) comparing each frame of the video signal with each reference frame and generating a result; and
- (c) determining which frames of the video signal belong to the advertising section according to the result.

[Claim 2] 2. The method of claim 1 wherein when performing step (b), if a similarity of a frame of the video signal and a reference frame is greater than a predetermined similarity, the frame of the advertising section is before the frame of the video signal.

[Claim 3] 3. The method of claim 1 wherein when performing step (b), if a similarity of a frame of the video signal and a reference frame is greater than a predetermined similarity, the frame of the advertising section is after the frame of the video signal.

[Claim 4] 4. The method of claim 1 wherein step (a) comprises:

- (d) broadcasting a reference video signal, the reference video signal capable of providing a plurality of frames in sequence for displaying dynamic images; and
- (e) after a user assigns a frame from the reference video signal, recording the frame assigned by the user as a reference frame.

[Claim 5] 5. The method of claim 1 wherein when performing step (a), calculating representation value corresponding to each reference frame and storing the representation value, and when performing step (b), calculating representation value corresponding to each frame of the video signal and

comparing the representation value of each frame of the video signal with the representation value of each reference frame for generating the result.

[Claim 6] 6. A signal processing system for detecting an advertising section within a video signal comprising:

a memory for storing at least one reference frame;
a buffer module for storing the video signal, the video signal capable of providing a plurality of frames in sequence for displaying dynamic images;
a comparison module for comparing a similarity of each frame of the video signal and each reference frame and generating a result; and
a decision module for deciding which frames of the video signal belong to the advertising section according to the result.

[Claim 7] 7. The signal processing system of claim 6 wherein if the similarity of a frame of the video signal and a reference frame is greater than a predetermined similarity, the frame of the advertising section is before the frame of the video signal.

[Claim 8] 8. The signal processing system of claim 6 wherein if the similarity of a frame of the video signal and a reference frame is greater than a predetermined similarity, the frame of the advertising section is after the frame of the video signal.

[Claim 9] 9. The signal processing system of claim 6 further comprising an interface module for receiving a frame assigned by a user from a reference video signal, the memory storing the reference frame received by the interface module.

[Claim 10] 10. The signal processing system of claim 6 further comprising a process module for calculating representation value

corresponding to each frame, the memory storing the representation value for each reference frame, and the comparison module comparing the representation value of each frame of the video signal with the representation value of each reference frame for generating the result.